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10/576,020	04/17/2006	Philipp Schafer	288936US0PCT	9311

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EXAMINER
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ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
09/28/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/576,020	SCHAFER, PHILIPP	
	Examiner	Art Unit	
	BIJAN AHVAZI	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 7-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 7-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 June 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the amendment filed on June 08, 2009.

2. Claims 1-4, 7-20 are pending. Claims 1, 7, 11-14, 16 and 18 are amended. Claims 5-6 are cancelled.

3. The objection of the disclosure because of the minor informalities is withdrawn in view of the applicant's amendment.

4. The rejection of claims 11 and 18 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn in view of the applicant's amendment.

5. The rejection of claims 1-5, 7, 11-13, 16, 17 and 20 under 35 U.S.C. 102(b) as being anticipated by Philip Schaefer (EP 1300474 A1, machine translation) is withdrawn in view of the applicant's amendment.

6. The rejection of claims 6, 8-10, 14, 15 and 19 under 35 U.S.C. 103(a) as being unpatentable over Philip Schaefer (EP 1300474 A1, machine translation) as applied to claims 1-5, 7, 11-13, 16, 17 and 20 above, and further in view of Will Helmut (DE 3921145A1, machine translation) is withdrawn in view of the applicant's amendment.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 11-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 11 recites the limitation "…….a solvent other than water…." which is nowhere supported in the specification and is therefore considered as new matter. Claims 12-14 as being depended on claim 11 are rejected as well.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-4, 7-15, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Philip Schaefer (EP 1300474 A1, machine translation), in view of Will Helmut (DE 3921145A1, machine translation).

Regarding claims 1-4, 7-8, and 20, Philip Schaefer (EP 1300474 A1, machine translation) teaches a process for correcting at least one defect in a grain layer of a full-grain leather, wherein an aqueous polymer dispersion containing polyurethane and/or polyacrylate and additionally isobutene filled hollow microspheres having a diameter or less than 45 μm or compact particles (Col. 4, ¶0018) from which such hollow microspheres can be formed in situ by heating is applied to the leather, with the solidified polymer dispersion being applied under pressure and with heating at an embossing temperature below 120 °C by means of an embossing roller having a finely structured surface corresponding to the napa grain structure, and the resulting fully-grained napa cattle leather to which the polymer dispersion has been applied and thus pressed into the defects (Col. 5, ¶0019). The process serves to cover surface

defects in the hide (Col. 10, ¶0044). Philip Schaefer does not expressly disclose that the process, wherein the compact particles having a size of less than 10 µm are used in an amount of from 15 g to 60 g, based on 1 kg of 40% strength aqueous, plastics dispersion.

However, Will Helmut discloses the use of microcapsules with an average particle size from 2 to 50 µm (Page 2, ¶6, line 1) with the recited amount as shown in Example 3 (Page 3, ¶4, lines 1-7). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the process for correcting at least one defect in a grain layer of a full-grain leather by Philip Schaefer so as to include the compact particles size as taught by Will Helmut with reasonable expectation that this would result in providing defect correction with hollow microspheres which are at least partially formed from the small compact particles in the solidified plastics dispersion. Thus, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive composition because the disclosure of the inventive subject matter appears within generic disclosure of the prior art as taught by Will Helmut.

Regarding the recited temperature from 120°C to 180°C, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that a ***prima facie*** case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (MPEP 2144.05). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the process for correcting at least one defect in a grain layer of a full-grain leather by Philip Schaefer so as to include specific temperature rang with reasonable expectation that this would result in providing

defect correction with hollow microspheres which are at least partially formed from the small compact particles in the solidified plastics dispersion.

Regarding claims 9-10, Philip Schaefer teaches a process for correcting at least one defect in a grain layer of a full-grain leather, wherein the grain side of the full grain napa cowhide which consists of a stabilized dispersion containing polyurethane (e.g thermoplastic) and/or polyacrylate and comprising primarily hollow microspheres have a thin shell which consists of at least 75% polyvinylidene chloride and less than 25% polyacrylnitrile, and they contain a heavy gas, preferably isobutene (Col. 7, ¶0031) in their interior (reads on a liquid blowing agent) with the embossing of the first layer with the aid of pressure and heat, the shells of some of the microspheres are ruptured given an embossing temperature below 120 °C.

Regarding claims 11-13, Philip Schaefer teaches a process for correcting at least one defect in a grain layer of a full-grain leather, wherein the interspaces between the hollow microspheres form the open cells are needed for the water vapor permeability and breathability. These open cells can be further multiplied by inventively opening the thin shells of individual hollow microspheres by mechanical and/or chemical means, so that individual hollow microspheres thereby also form open cells. To accomplish this, the second layer can inventively contain a solvent such as ethylacetate or methylethylketone which partly dissolves the thin shell of individual hollow microspheres. Individual microspheres can also be opened mechanically, for instance by inserting needles into their shells (Col. 3, ¶0011).

Regarding claim 14, Philip Schaefer teaches a process for correcting at least one defect in a grain layer of a full-grain leather, wherein the recited mixture comprises 90 parts of water

and 10 parts of ethyl acetate is considered to be held a ***prima facie*** case of obviousness where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*,105 USPQ 223). Thus, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive composition because the disclosure of the inventive subject matter appears within generic disclosure of the prior art.

Regarding claim 15, Philip Schaefer teaches a process for correcting at least one defect in a grain layer of a full-grain leather, wherein the first layer, namely the foam-like pigmented layer, comprises hollow microspheres with a small diameter which are arranged closely adjacent one another and which brace against one another, preventing bursting of the thin shells under stress and escaping of the gas (Col. 3, ¶0012) It would still have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive compact particles comprising pigmented compact particles whose color correspond to that of the grain layer because the disclosure of the inventive subject matter appears within generic disclosure of the prior art.

Regarding claim 19, Philip Schaefer teaches a process for correcting at least one defect in a grain layer of a full-grain leather, wherein the embossing expediently occurs with the aid of an embossing roll with a temperature between 80 to 120 ºC (Col. 5, ¶0021) whereby the thermal contact between the embossing roll and the first layer lasts less than 2 seconds. The surface of the embossing roll comprises depressions corresponding to the napa grain structure that is to be produced, into which portions of the first layer penetrate (by foaming) during embossing, so that the desired napa graining emerges.

11. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Philip Schaefer (EP 1300474 A1, machine translation) and Will Helmut (DE 3921145 A1, machine translation) as applied to claim 1-4, 7-15, 19-20 above, and further in view of Zhang Shuwen (CN 1161377A, machine translation).

Regarding claims 16-18, Philip Schaefer and Will Helmut teach the features as discussed above. Philip Schaefer and Will Helmut do not expressly teach the hollow microspheres of the plastics filling compound which are not present on the grain layer where the at least one defect is not present.

However, Zhang Shuwen teaches a leather repairing agent acrylic acid copolymer water dispersed substance which are not present on the grain layer where the at least one defect is not present. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the process for correcting at least one defect in a grain layer of a full-grain leather by Philip Schaefer in view of the compact particles size by Will Helmut so as to include microspheres of the plastics filling applied only to defect area with reasonable expectation that this would result in providing defect correction with hollow microspheres which are at least partially formed from the small compact particles in the solidified plastics dispersion.

Response to Arguments

12. Applicant's arguments with respect to claim 1-4, 7-20 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the application by Schaefer of a microsphere containing pigment layer, with a certain thickness, is applied to the entire grain side of leather,

including where defects are not present, because a pigment finish would be applied uniformly so that a desirable/marketable, uniformly colored end-product could be obtained. Accordingly, Schaefer does not disclose/anticipate Applicants' claimed leather (claims 16-18) where the hollow microspheres are not present on the leather where the defects are not present.

The examiner respectfully disagrees. Since, the applicant's amendment necessitated the new ground(s) of rejection presented in this Office action, Zhang Shuwen teaches a leather repairing agent acrylic acid copolymer water dispersed substance which are not present on the grain layer where the at least one defect is not present, Whereby the applicant's arguments are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the application by Schaefer discloses the use of "an embossing roll with a temperature between 80 to 120°C (Col. 5, ¶0021)" wherein the subject matter of original claim 6 (i.e., pressure roll is heated to a temperature of 120-180°C). As stated in the previous office action and in the view of the above discussion regarding the recited temperature from 120°C to 180°C, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that a ***prima facie*** case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (MPEP 2144.05). Thus, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the process for correcting at least one defect in a grain layer of a full-grain leather by Philip Schaefer so as to include specific temperature rang with reasonable expectation that this would result in providing defect

correction with hollow microspheres which are at least partially formed from the small compact particles in the solidified plastics dispersion.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijan Ahvazi, Ph.D. whose telephone number is (571)270-3449. The examiner can normally be reached on M-F 8:0-5:0. (Off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BA/
Bijan Ahvazi,
Examiner
Art Unit 1796

09/25/2009

/Harold Y Pyon/
Supervisory Patent Examiner, Art Unit 1796